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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/538,629	06/10/2005	Lilla Boroczky	US020539	8938
24737 7590 03/12/2010 PHILIPS INTELLECTUAL PROPERTY & STANDARDS P.O. BOX 3001 BRIARCLIFF MANOR, NY 10510				
EXAMINER				
ANYIKRE, CHIKAO DILE				
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2621				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/538,629

**Applicant(s)**

BOROCZKY ET AL.

**Examiner**

CHIKAODILI E. ANYIKIRE

**Art Unit**

2621

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 17-21 and 25 is/are rejected.
- 7) ☒ Claim(s) 7-16 and 22-24 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 June 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB06)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ ~~Notes of Informal Patent Application~~
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. This application is responsive to application number (10/538629) filed on June 10, 2005. Claims 1-25 are pending and have been examined.

### ***Information Disclosure Statement***

2. Acknowledgement is made of applicant's information disclosure statement.

### ***Claim Objections***

3. Claim 15 objected to because of the following informalities: Claim 15 is dependent on claim 15 and therefore is not properly further limited as a dependent claim. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-6 and 19-21 rejected under 35 U.S.C. 102(e) as being anticipated by Deshpande (US 2003/0081854).

As per **claim 1**, Deshpande discloses a system for post-processing of decoded digital video, comprising:

a metric calculation unit (Fig 1 element 110 and Fig 2 element 230) for calculation of a metric M for determining the type, aggressiveness, and order of application of a plurality of post-processing modules to the decoded digital video, the metric being based on block-based coding information obtained from the decoded digital video (paragraph [0036]; Deshpande discloses a edge strength calculation which results in a multiple post-processing system);

a post processing unit (Fig 1 element 130) for improving the quality of the decoded digital video based on the metric M, comprising the plurality of post-processing modules (paragraph [0033] lines 10 -12); and

a control unit (Fig 1 element 120) for controlling the activation of at least one post-processing module, of the plurality of post-processing modules of the post-processing unit, based on the metric M, wherein, the quality of the decoded digital video is improved by the control unit activating, in order, at least one of the plurality of post-processing modules and the at least one activated post-processing module processing the digital video based on the metric M (paragraph [0033]; Deshpande discloses in Fig 1 a process where a signal is sent from the De-Ringing Filter to the Edge Sharpener).

As per **claim 2**, Deshpande discloses the system of claim 1, wherein said plurality of post-processing modules comprises at least one algorithm of each type selected from the group of types consisting of artifact reduction, sharpness

enhancement, and resolution enhancement (Fig 1 element 130 and Fig 4; paragraph [0049]; Deshpande teaches artifact reduction and edge sharpening (i.e. sharpness enhancement)).

As per **claim 3**, Deshpande discloses the system of claim 2, wherein the at least one artifact reduction algorithm comprises at least one of a luminance deringing algorithm based on the metric M and a chrominance deringing algorithm based on the metric M (Fig 4 element 150; paragraph [0050]).

As per **claim 4**, Deshpande discloses the system of claim 2, wherein the control unit further comprises a first mechanism that activates the at least one artifact reduction algorithm and turns off the at least one sharpness enhancement algorithm according to the formula:  $M < VP\_THRED$  and turns off the at least one artifact reduction algorithm and activates the at least one sharpness enhancement algorithm, otherwise, wherein VP\_THRED is a pre-determined threshold and once activated, the algorithm determines how "aggressively" the algorithm is performed based on the value of the M metric (paragraph [0065] lines 3 – 6).

As per **claim 5**, Deshpande discloses the system of claim 2, wherein the control unit further comprises a second mechanism that determines if the algorithm that was activated performed well and if so activates the algorithm that was turned off (paragraph [0050]).

As per **claim 6**, The system of claim 4, wherein the at least one artifact reduction algorithm comprises at least one of a luminance deringing algorithm based on the

metric M and a chrominance deringing algorithm based on the metric M (Fig 4 element 150; paragraph [0050]).

Regarding **claim 19**, arguments analogous to those presented for claim 1 are applicable for claim 19.

Regarding **claim 20**, arguments analogous to those presented for claim 18 are applicable for claim 20.

As per **claim 21**, the method of claim 20, wherein the step of providing at least one artifact reduction algorithm further comprises the step of providing at least one luminance deranging algorithm based on the metric M and at least one chrominance deranging algorithm based on the metric M (Fig 4 element 150; paragraph [0050]).

### ***Allowable Subject Matter***

1. Claims 7-16, and 22 - 24 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHIKAODILI E. ANYIKIRE whose telephone number is (571)270-1445. The examiner can normally be reached on Monday to Friday, 7:30 am to 5 pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha D. Banks-Harold can be reached on (571) 272 - 7905. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Marsha D. Banks-Harold/  
Supervisory Patent Examiner, Art Unit 2621

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